

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicants thank the Examiner for initialing the information disclosure statement filed on November 2, 2006, accepting the drawings filed on June 5, 2006, indicating that certified copies of the priority documents are received and carefully considering this application.

Disposition of the Claims

Claims 12-28 were pending in this application. Claims 19 and 24 are cancelled by way of this reply without prejudice or disclaimer. Accordingly, claims 12-18, 20-23, and 25-28 are currently pending in this application. Claims 12, 20, 21, 22, 27, and 28 are independent. The remaining claims depend, directly or indirectly, from claims 12 and 22.

Claim Amendments

Claims 12-16, 20, 22, and 27 are amended by way of this reply to clarify the invention and correct typographical errors. Specifically, claims 12 and 20 are amended by way of this reply to include the subject matter of now cancelled dependent claim 19. Additionally, claims 22 and 27 are amended by way of this reply to include the subject matter of now cancelled dependent claim 24. Dependent claims 13-16 are amended for clarity and consistency with the amendments to the independent claims. No new subject matter is added by way of this amendment as support may be found, for example, on p. 8, ll. 8-11 in the Specification and in the Claims of the Application as filed.

Objection to the Specification

The Specification stands objected to for failing to provide antecedent basis for the term, “first checksum,” and the term, “second checksum.” This objection is respectfully traversed.

Under MPEP § 108.01(o), “[t]he meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification with clear disclosure as to its import....”

Turning to the claims, the claims recite “a first checksum” and “a second checksum” to distinguish between the checksum calculated for one code portion from the checksum calculated for another code portion. These terms have clear meaning in the Specification. Specifically, the Specification states that a checksum is calculated by the processor for each code portion. *See, e.g.*, p. 6 ll. 15-19 and 28-30 of the Specification. This checksum is reinitialized during execution for the next code portion. *Id.* Thus, it is apparent from the Specification that there are multiple checksums calculated. Because the Specification clearly denotes the existence of multiple checksums, the use of the “first” and “second” to distinguish between the two (*i.e.* multiple) checksums recited in the claims has clear meaning from the Specification. Therefore, the Specification does provide proper antecedent basis for both checksums. Accordingly, withdrawal of this objection is respectfully requested.

Rejection under 35 U.S.C. § 101

“The test to determine whether a claimed process recites patentable subject matter under § 101 is whether: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing. *In re Bilski*, 545 F.3d 943, 961-62 (Fed. Cir. 2008) (en banc)....

Specifically, the Court rejected the viability of the “useful, concrete, and tangible result” language of *State Street Bank & Trust Co. v. Signature Financial Group*, 149 F.3d 1373 (1998), as a test, because while such an inquiry “may in many instances provide useful indications of whether a claim is drawn to a fundamental principle or a practical application of such a principle,” it inappropriately focuses on the result of the claimed invention rather than the invention itself. *In re Lewis Ferguson*, ___ F.3d ___, ___, 2009 WL 565074 *4 (Fed. Cir. 2009).” See, *Ex Parte Borenstein*, slip op. at 6 (Board Pat. App., 2009).

Claims 12-19 and 22-26 as being directed to non-statutory subject matter

Claims 12-19 and 22-26 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. As discussed above, claims 19 and 24 are cancelled by way of this reply. Accordingly, this rejection is now moot with respect to claims 19 and 24. To the extent that this rejection applies to the remaining amended claims, this rejection is respectfully traversed.

As discussed above, a claimed process is patent-eligible under 35 U.S.C. § 101 if it is tied to a particular machine or apparatus. See, e.g., *Borenstein*; See also *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (en banc).

Amended claim 12 recites, in part, “executing, on a processor, the first code portion.” Amended claim 22 recites, in part, “executing, by a processor, the first routine.” Based on the above amendment, it is clear that amended claims 12 and 22 explicitly require a processor for at least one step. A processor is a particular type of apparatus. Because amended claims 12 and 22 necessarily require a processor, amended claims 12 and 22 are necessarily “tied to a particular machine or apparatus,” thereby are statutory under the standard articulated in *In Re Bilski*.

Accordingly, for at least the reasons mentioned above, amended claims 12 and 22 satisfy the requirements 35 U.S.C. § 101. Dependent claims 13-19 and 23-26, which depend, directly or indirectly, from amended claims 12 and 22, satisfy the requirements of 35 U.S.C. § 101 for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Claim 12, 20, 22, and 27 failure to provide a useful, concrete, and tangible result

Claims 12, 20, 22, and 27 stand rejected under 35 U.S.C. § 101 for failure “to provide a tangible result, and there must be a practical application, by either 1) transforming (physical thing) or 2) by having the final result (not the steps) achieve a useful ..., concrete..., and tangible... result.”

As discussed above in *Borenstein*, the court in *In re Bilski*, has explicitly overruled this standard. Therefore, the basis for this rejection is no longer proper and, accordingly, withdrawal of this rejection is respectfully requested.

Rejection under 35 U.S.C. § 102(e)

Claims 12-28 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Pat. No. 7,168,065 (Naccache). As discussed above, claims 19 and 24 are cancelled by way of this reply. Accordingly, this rejection is moot with respect to claims 19 and 24. To the extent that this rejection applies to the remaining amended claims, this rejection is respectfully traversed.

“A claim is anticipated only if *each and every element* as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Further, “[t]he identical invention must be shown in as complete detail as is contained in the ... claim.” MPEP §

2131 (emphasis added). Applicants respectfully submit that the Examiner's contentions do not support a rejection of the claims under 35 U.S.C. § 102(e), for at least the reasons given below.

Claims 12-18, 20, and 21

Claims 12-18, 20, and 21 are directed to verifying the execution of a program. Specifically, a code portion of the program is executed. During the execution, a checksum is calculated using information about the instructions in the first code portion. The checksum that is calculated during execution is compared with a pre-calculated checksum. If the checksum that is calculated during execution is equal to the pre-calculated checksum, then the code portion is exited. *See, e.g.*, p. 5, ll. 18-26 of the Specification.

Turning to the rejection, amended independent claims 12, 20, and 21 require, in part, that “the first pre-calculated checksum is calculated during compilation of the program.” Applicants respectfully assert that Naccache fails to disclose the aforementioned limitation. Specifically, Naccache is completely silent with respect to compiling a program. Because Naccache is silent with respect to compiling a program, Naccache cannot disclose calculating a pre-calculated checksum while compiling the program as required by amended claims 12, 20, and 21.

As shown above, Naccache fails to disclose all of the limitations of claims 12, 20, and 21. Accordingly, claims 12, 20, and 21 are patentable over Naccache. Claims 13-18, which depend, directly or indirectly from claim 12 are patentable over Naccache for at least the same reasons as claim 12. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 22, 23, and 25-28

Regarding claims 22, 23, and 25-28, claims 22, 23, and 25-28 are directed to verifying the execution of a program that includes two routines. Specifically, the first routine of the program is executed. During the execution, a counter is incremented by a value associated with each of the instructions in the first routine. The value of the counter is compared with a pre-calculated value. If the value of the counter is equal to the pre-calculated value, then the first routine is exited and the second routine is entered. *See, e.g.*, p. 7, ll. 24 - p. 8, ll. 11 of the Specification.

Further, amended independent claims 22, 27, and 28 require that the first routine includes a first branch and a second branch. In other words, the first branch corresponds to a first possible execution path in the first routine and the second branch corresponds to a second possible execution path in the first routine. The first branch and second branch are balanced to have the value of the counter resulting from executing instructions in the first branch equal to the value of the counter resulting from executing instructions in the second branch. Thus, in a correct execution of the program, the value of the counter is equal to the pre-calculated value regardless of whether the first branch or the second branch is executed (*i.e.*, regardless of which execution path is actually executed).

Turning to Naccache, Naccache fails to disclose balancing a first branch with a second branch to have a value from a counter resulting from executing instructions in the first branch equal to the value of the counter resulting from executing instructions in the second branch. Specifically, Naccache is directed to verifying that all instructions in a sequence of instructions are

executed. *See, e.g.,* Naccache, col. Abstract. Naccache clearly discloses and requires that each of the instructions in the sequence is executed in succession. *See, e.g.,* Naccache, col. 8, ll. 53-65. In other words, executing the sequence of instructions in succession corresponds to only a single execution path. Because only a single execution path exists in Naccache, the sequence does not have multiple branches, which requires multiple possible execution paths. Therefore, Naccache does not disclose balancing a first branch with a second branch to have a value from a counter resulting from executing instructions in the first branch is equal to the value of the counter resulting from executing instructions in the second branch as required by the amended claims.

As shown above, Naccache fails to disclose all of the limitations of claims 22, 27, and 18. Accordingly, claims 22, 27, and 28 are patentable over Naccache. Claims 23, 25, and 26, which depend, directly or indirectly from claim 22 are patentable over Naccache for at least the same reasons as claim 22. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicants believe this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 09669/087001).

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Respectfully submitted,

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